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Docket No.: S01022.81066

## IN THE SPECIFICATION

Please amend the specification as shown below.

Please replace the paragraphs beginning on page 1, line 21 with the following:

Columns Column control circuits  $CC_1$  to  $CC_n$  enable respective biasing of columns  $C_1$  to  $C_n$ . The columns addressing the LEDs which are desired to be activated are biased by a current to a voltage  $V_{col}$  greater than the threshold voltage of the LEDs of the screen. The columns which are not desired to be activated are grounded.

A An LED connected to the activated line and to a column biased to  $V_{col}$  is then on and emits light. Voltage  $V_{line}$  is provided to be sufficiently high so that the LEDs connected to the non-activated lines at voltage  $V_{col}$  and to the columns are not conductive and do not emit light.

Fig. 2 shows a column control circuit CC and a line control circuit CL respectively addressing a column C and a line L connected to a <u>an</u> LED d of the screen. Line control circuit CL comprises a power inverter 1 controlled by a line control signal  $\phi_L$ . Power inverter 1 comprises an NMOS transistor 2 enabling discharge of line L when  $\phi_L$  is high and a PMOS transistor 3 enabling charging line L to bias voltage  $V_{line}$  when  $\phi_L$  is low.

Column control circuit CC comprises a current mirror formed in the present example with two transistors 4, 5 of type PMOS. Transistor 4 forms the reference branch of the mirror and transistor 5 forms the duplication branch. The sources of transistors 4 and 5 are connected to a biasing voltage V<sub>pol</sub> on the order of 15 V for OLED screens. The gates of transistors 4 and 5 are connected to each other. The drain and the gate of transistor 4 are connected to each other. Transistor 4 is thus diode-assembled, the source-gate voltage (Vsg<sub>4</sub>) being equal to the source-drain voltage (Vsd<sub>4</sub>). The current running through conducted by transistor 4 is set by a current source 6 connected to the drain of transistor 4. Current 6 provides a so-called "luminance" current I<sub>1</sub>. The drain of transistor 5 is connected to column C via a column selection circuit formed of a PMOS transistor 7 and of an NMOS transistor 8. The source of PMOS transistor 7 is connected to column C. The source of transistor 8 is grounded and its drain is connected to column C. A column control

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signal  $\phi_C$  is connected to the gate of PMOS transistor 7 and to the gate of NMOS transistor 8. When column control signal  $\phi_C$  is high, transistor 8 discharges column C. When it is low, transistor 7 is on and column C charges to reach voltage  $V_{col}$ . When line L and column C are activated, line control signal  $\phi_L$  and column control signal  $\phi_C$  are respectively high and low, LED d is on and the current flowing through the diode is equal to luminance current  $I_L$ .

Please replace the paragraph beginning on page 2, line 26 with the following:

When the copy of current  $I_l$  is correct, transistor 5 is in saturation state and voltage  $Vsd_5$  is at least equal to source-drain voltage  $Vsd_4$  of transistor 4. A correct copy thus imposes requires for biasing  $V_{pol}$  to be at least equal to the previously-mentioned sum when the current flowing therethrough is equal to luminance current  $I_l$ . If biasing voltage  $V_{pol}$  is too low, the current flowing through LED d is smaller than current  $I_l$  and the luminance of the diodes is insufficient.

Please replace the paragraph beginning on page 3, line 7 with the following:

There exist control circuits which have a fixed biasing voltage  $V_{pol}$  determined according to the maximum desired luminance current  $I_l$ . The disadvantage of such circuits is their strong large electric power consumption.

Please replace the paragraph beginning on page 3, line 24 with the following:

To achieve these <u>and other</u> objects, the present invention provides a device for regulating the biasing voltage of column control circuits of an <u>array</u> screen-array made of LEDs distributed in lines and columns, the column control circuits comprising a current mirror having a reference branch and several duplication branches connected to the biasing voltage, each duplication branch being coupled to a column of the screen, the reference branch being connected at a reference node to a reference current source providing a desired luminance current, said device

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comprising: first measuring means providing a first signal representative of the voltage of at least one of the columns; second measuring means providing a second signal representative of the voltage of the reference node; and an adjustment circuit receiving the first and second signals and being adapted to increase the biasing voltage when the first signal is lower than the second signal and conversely.

Please replace the paragraph beginning on page 5, line 16 with the following:

Fig. 2, previously described, shows a column control circuit and a line control circuit addressing a <u>an</u> LED of a screen;

Please replace the paragraph beginning on page 8, line 15 with the following:

An advantage of the regulation device according to the present invention is that the biasing voltage is always minimum, which enables making saves power-savings.